

Work Order ID 84059

\*84059\*

Page 1

Wednesday, May 02, 2012 10:14:33 AM

Item ID: D3610-041

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Bracket

Start Date: 5/2/2012 Start Qty: 12.00

\*12\*

Cust Item ID:

Required Date: 5/18/2012 Req'd Qty: 12.00

\*12\*

Customer:

Reference:

Approvals:

Process Plan: mf

Date: 12-05-02 Tooling:

Date:

Run Start \*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop \*NR2\*

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

Draw Nbr

Revision Nbr

D3610

Rev A

100

0.00

\*100\*

BAND SAW

Bandsaw

Memo

Cut blank

7.900" long

0.00

FK 12/05/22

12

110

0.00

\*110\*

HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.00

HAAS CNC vertical machine #1

1- Mill as per Folio FA692 Rev: B & Dwg D3610 Rev: B 2-Deburr  
per dwg D3610

FK-12/05/26

12

120

0.00

\*120\*

QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

FK-12/05/26

12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**\*84059\***

Page 2

**Accept**

**\*N900040100\***

Setup Start \*NS1\*

Stop \*NS2\*

**Start Date:** 5/2/2012      **Start Qty:** 12.00      **\*12\***

**Cust Item ID:**

**Required Date:** 5/18/2012      **Req'd Qty:** 12.00      **\*12\***

**Customer:**

**Reference:**

**Approvals:** \_\_\_\_\_ **Process Plan:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Tooling:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Run Start** **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop \*NR2\*

## Operation Description

## Set Up/ Run Hours

[illegible]

130

QC8- Inspect parts - second check

0.00

**\*130\***

and 12/05/28

12 ~~4~~

QC

## Memo

0.00

## Quality Control

140

0.00

**\*140\***

### Small Fab

0.00

### Small Fab

## Memo

## Small Fab

1-C'SINK AS PER DWG D3610

150

QC5- Inspect part completeness to step on W/O

0,00

**\*150\***

Schluss

QC

## Memo

0.00

## Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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# Work Order ID 84059

Wednesday, May 02, 2012 10:14:33 AM

**\*84059\***

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Item ID: D3610-041      Accept      **\*N900040100\***      Setup Start **\*NS1\***  
Revision ID:      Stop **\*NS2\***  
Item Name: Bracket  
Start Date: 5/2/2012      Start Qty: 12.00      **\*12\***      Cust Item ID:  
Required Date: 5/18/2012      Req'd Qty: 12.00      **\*12\***      Customer:  
Reference:

Approvals:      Process Plan:      Date:      Tooling:      Date:      Run Start **\*NR1\***  
QC:      Date:      SPC (Y/N):      Date:      Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3	0.00							
<b>*160*</b>									
Powdercoat	Memo	0.00							
Powder Coating	START TIME: 11:00	OVEN TEMPERATURE:							
	FINISH TIME: 11:30								
W121279	3250F								
170	QC3- Inspect Part Finish	0.00							
<b>*170*</b>									
QC	Memo	0.00							
Quality Control									
180	Small Fab	0.00							
<b>*180*</b>									
Small Fab	Memo	0.00							
Small Fab	Rivet Nut Plate as per Dwg D3610								

12X *[Signature]* 12/05/30  
12X *[Signature]* 12/05/31  
12X *[Signature]* 12/05/31

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**Work Order ID 84059****\*84059\***

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Wednesday, May 02, 2012 10:14:33 AM

Item ID: D3610-041

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Item Name: Bracket

Stop **\*NS2\***

Start Date: 5/2/2012 Start Qty: 12.00

**\*12\***

Cust Item ID:

Required Date: 5/18/2012 Req'd Qty: 12.00

**\*12\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

190

QC5- Inspect part completeness to step on W/O

0.00

**\*190\***

QC

Memo

0.00

Quality Control

200

Identify as per dwg & Stock Location **2YSA**

0.00

**\*200\***

Packaging

Memo

0.00

Packaging

210

QC21- Final Inspection - Work Order Release

0.00

**\*210\***

QC

Memo

0.00

Quality Control

ME  
12-06-04

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

Wednesday, May 02, 2012 10:14:32 AM

Page 1

Work Order ID: 84059

Parent Item: D3610-041

Parent Item Name: Bracket

Start Date: 5/2/2012

Required Date: 5/18/2012

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP rev A new issue 07.03.28 EC  
IPP rev B released, changed mat'l EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M4140N-B1.500X1.5000		Purchased	No			100	f	1.0900	0.5775	6.93			

~~4140 Steel Bar 1.50 x 1.50~~

4130 Steel bar 1.5 x 1.5

Location	Loc Qty	Loc Code
MAT034	1.09	
119871	1.09	

~~can't issue mat'l~~

MS20426AD3-4  
RIVET

Purchased No

119832

110 Each 3,280.0000

2

24

8.86

FK. 12/05/22

Location	Loc Qty	Loc Code
ST316	3280	
104374	614	
110398	2666	

24

EP 12/05/31

MS21075L3  
Nutplate

Purchased No

180 Each 137.0000

1

12

EP 12/05/31

Location	Loc Qty	Loc Code
GA	88	
121090	88	
ST303	49	
120910	49	

12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

<b>DART AEROSPACE LTD</b>		<b>Work Order:</b> 84059
<b>Description:</b> Plate		<b>Part Number:</b> D3610-1
<b>Inspection Dwg:</b> D3610	<b>Rev:</b> A <i>12/05/03</i>	<b>Page 1 of 1</b>

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.25 ✓	+/-0.030	1.248	✓		FK-04	Vern
0.250 ✓	+/-0.010	.250	✓		"	"
0.63 ✓	+/-0.030	.63	✓		"	"
<del>6.50</del>	<del>+/-0.030</del>	N/A				
<del>3.00</del>	<del>+/-0.030</del>	N/A				
2.677 ✓	+/-0.010	2.677	✓		"	"
0.38 ✓	+/-0.030	.374	✓		"	"
Ø0.277 ✓	+0.006/-0.001	.277	✓		"	"
Ø0.201 ✓	+0.005/-0.001	.201	✓		"	"
Ø0.098 ✓	+0.004/-0.001	.098	✓		"	"
0.88 ✓	+/-0.030	.868	✓		"	"
0.94 x 0.50 ✓	+/-0.030	.94 x .50	✓		"	"
0.250 ✓	+/-0.010	.250	✓		"	"
0.125 depth ✓	+/-0.010	.125	✓		"	"
7.75	+/-0.030	7.752	✓		ENC-02	Vern
4.25	+/-0.030	4.250	✓		FK-04	Vern
R .125	+/- .030	.125	✓		rad gauge	

<b>Measured by:</b> FK	<b>Audited by:</b> <i>AM</i>	<b>Prototype Approval:</b>	N/A
<b>Date:</b> 12/05/26	<b>Date:</b> 12/05/28	<b>Date:</b>	N/A

Rev	Date	Change	Revised by	Approved
A	08.04.21	New Issue	P/O D3610-041	KJ/DD

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

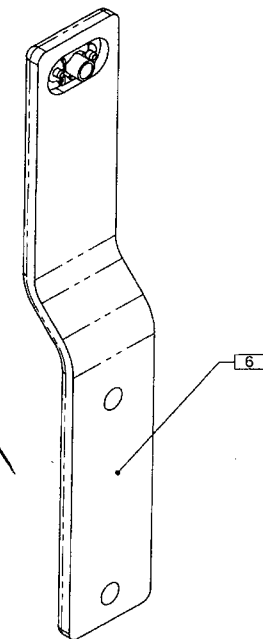
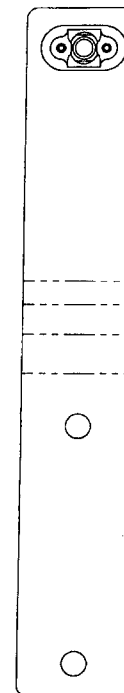
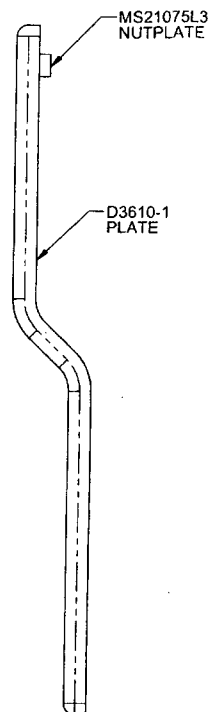
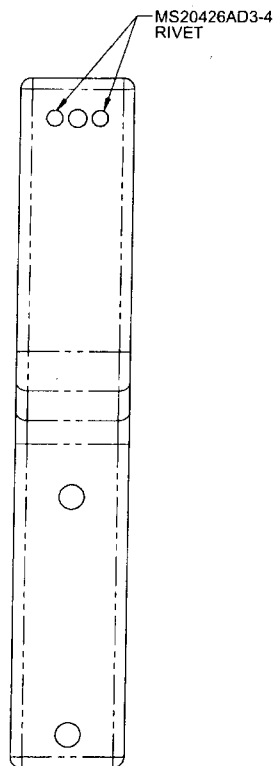
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

ITEM	QTY -041	P/N	DESCRIPTION
	X	D3610-041	BRACKET
1	1	D3610-1	PLATE
2	1	MS21075L3	NUT PLATE
3	2	MS20426AD3-4	RIVET



- NOTES:
- 1) MATERIAL: N/A
  - 2) FINISH: N/A
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3610-041" PER QSI044 METHOD 6.1
  - 7) WEIGHT: 0.67lbs

# **D3610-041 BRACKET**

B	DIM 4.25 WAS 3.00 (C7-3) DIM 7.75 WAS 6.50 (C7-2)	RP	12.04.13
A	NEW ISSUE	LE	07.04.20
REV.	DESCRIPTION	BY	DATE
DESIGN	LE	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RP		
CHECKED	AP	DRAWING NO.	REV. B
MFG. APPR.	AP	D3610	SHEET 1 OF 2
APPROVED	AP	TITLE	SCALE
DE APPR.	AP	BRACKET	NTS
DATE	12.04.13	COPYRIGHT © 2007 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR REPRODUCED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

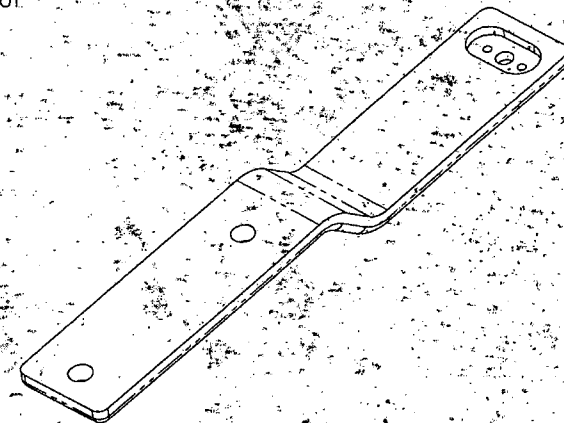
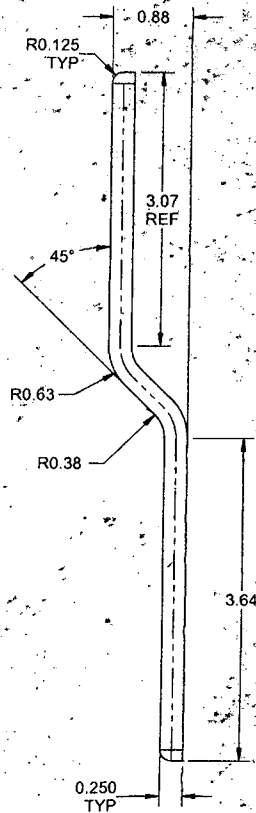
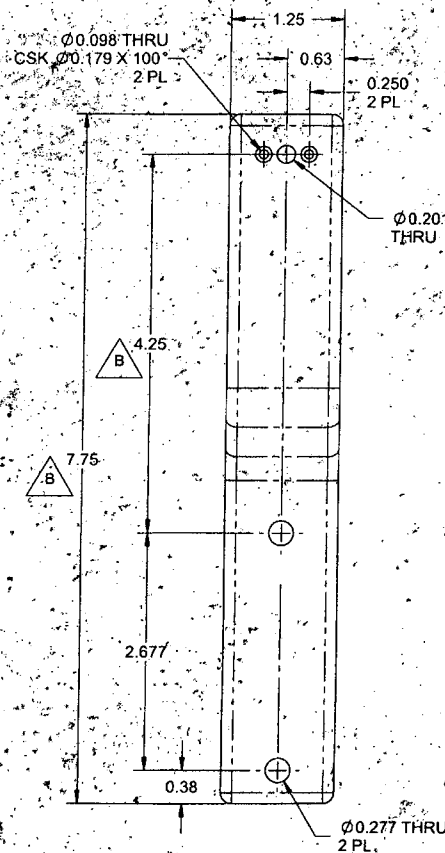
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



### D3610-1 PLATE

#### NOTES:

- 1) MATERIAL: 4130N STEEL BAR PER MIL-S-6758 OR AMS 6345 OR AMS 6348 OR 6370 OR 6528 (REF DART SPEC M4130N-B) OR 4140N STEEL BAR PER MIL-S-5626 OR AMS 6382 OR 6349 OR 6529 (REF DART SPEC M4140N-B)
- 2) FINISH: POWDER COAT GREY SANDETEX (4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.66lbs
- 8) PROFILE PER DRAWING FILE "D3610-1-REV B.STP"

DESIGN	LE	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RP		
CHECKED	A.P.	DRAWING NO.	REV. B
MFG. APPR.		D3610	SHEET 2 OF 2
APPROVED		TITLE	SCALE
DE APPR.		BRACKET	NTS
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RELEASED  
2012-04-30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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